

LISTING OF CLAIMS

1. **(currently amended)** A bone stabilizing system, having a rigidizing plate with holes and two or more bone screws, for the purpose of fixing one bone segment, within a bone column, with respect to one or more other bone segments or an implant within the bone column, the stabilizing system containing:
 - (a) the bone screws, with a head portion having a driving feature which is engaged by a driving tool, a plate shank portion, a threaded portion, and a bone shank portion extending through the plate holes and ~~a machined and threaded holes in the bone~~ into the underlying bone ~~for a distance of 1 mm or greater,~~
 - (b) the rigidizing plate, with holes to receive the bone screws for the purpose of retaining the plate to the bone segment, and
 - (c) the bone screw's plate shank portion, is configured and sized to make an interference fit within the plate holes and the screw's bone shank portion is configured and sized to make an interference within ~~the bone shank portion, of the machined holes~~ in the bone segments.
2. **(cancelled)**
3. **(currently amended)** The bone stabilizing system of claim 1, wherein the interference fit portion of the bone screws contain one or more locking tapers which extend into the bone ~~and engage mating tapers in the bone.~~
4. **(currently amended)** The bone stabilizing system of claim 3, wherein a portion of the screw shanks engage the plate holes which are tapered to engage mating tapers of a portion of the bone screw shanks.
5. **(cancelled)**
6. **(previously presented)** The bone stabilizing system of claim 1, wherein the screws are fixed to the plate and the bone holes with an adhesive material.

Claims 7-11 (cancelled)

12. **(previously presented)** The bone stabilizing system of claim 1, wherein the screws have self-tapping screw threads.

13. **(cancelled)**

14. **(currently amended)** A bone stabilizing method, using plates with holes and bone screws for the purpose of fixing one bone segment with respect to one or more other bone segments or implants within a bone column comprising the following steps:

- (a) providing the system components of claim 4;
- (b) machining holes in the bone segments for the purpose of retaining the engagement of the bone screws and retaining fixation of the plate to the bones, and
- (c) placing the screws, with a shank portion and a head portion configured and sized to be affixed by an interference fit within the plate hole and the bone ~~and also affixed within a portion of the machined~~

Claims 15-28. (cancelled)

29. **(new)** A system for stabilizing a first bone segment within a bone column relative to a second bone segment in the bone column, the stabilizing system comprising:

a plurality of bone screws, each having a head portion at a first end thereof and a threaded shank portion at a second end thereof, with an unthreaded shank portion therebetween; and

a rigidizing plate, with a plurality of tapered holes corresponding to the plurality of bone screws, each hole being sized and configured for making a locking fit with a first portion of the unthreaded shank portion of the bone screw received therein, the plate sized to position at least two holes for screw placement therethrough into the first bone segment and at least two holes for screw placement therethrough into the second bone segment;

wherein a second portion of the unthreaded shank portion passes through the plate hole and extends into the bone segment when the threaded shank portion is engaged into the bone segment.